

**In the Claims:**

Please cancel claims 1-16 and 33-48 without prejudice to the inclusion of the subject matter contained therein in any later filed continuation and/or divisional application(s).

Please amend claims 17, 21, 25 and 29-32.

Claims 1-16 (Canceled)

17. (Currently amended) A method of rescuing a mammal from a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to an irradiated mammal, thereby rescuing said mammal from a lethal dose of total body irradiation, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

18. (Previously presented) The method of claim 17, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

19. (Previously presented) The method of claim 18, wherein said mammal is a human.

20. (Previously presented) The method of claim 17, wherein said administration is infusion.

21. (Currently amended) A method of enhancing hematopoiesis in a mammal, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

22. (Previously presented) The method of claim 21, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

23. (Previously presented) The method of claim 22, wherein said mammal is a human.

24. (Previously presented) The method of claim 21, wherein said administration is infusion.

25. (Currently amended) A method of enhancing hematopoietic stem cell differentiation in a mammal given a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to an irradiated mammal, thereby enhancing hematopoietic stem cell differentiation in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

26. (Previously presented) The method of claim 25, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

27. (Previously presented) The method of claim 26, wherein said mammal is a human.

28. (Previously presented) The method of claim 25, wherein said administration is infusion.

29. (Currently amended) A method of enhancing the hematopoietic recovery in a mammal given a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to an irradiated mammal, thereby

enhancing the hematopoietic recovery in said mammal, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

30. (Currently amended) A method of treating a mammal comprising an ablated marrow, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to a mammal, thereby treating said mammal comprising an ablated marrow, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing up for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

31. (Currently amended) A method of enhancing hematopoiesis in a mammal comprising an ablated marrow, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal comprising an ablated marrow, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

32. (Currently amended) A method of increasing survival of a mammal exposed to a lethal dose of total body irradiation, said method comprising administering isolated marrow stromal cells from an allogenic donor mammal to an irradiated mammal, thereby increasing the survival of a mammal exposed to a lethal dose of total body irradiation, wherein said isolated marrow stromal cells are administered immediately upon isolation or following *in vitro* culturing for no more than the third passage, further wherein said isolated marrow stromal cells are short-term cultured cells.

Claims 33-48 (Canceled)